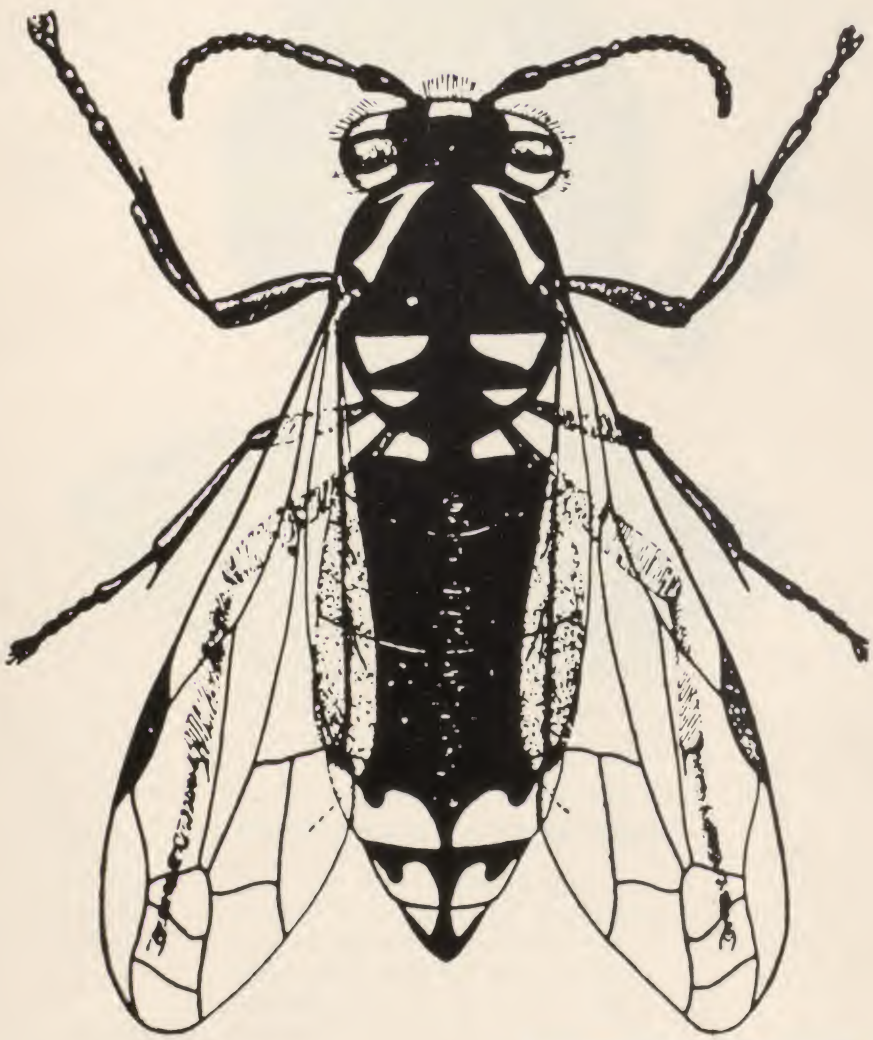
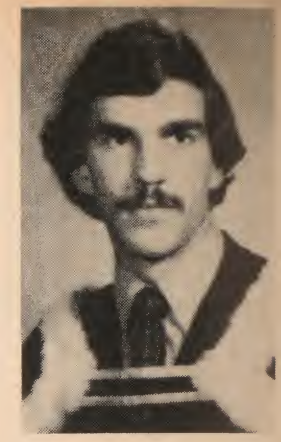
The macdonald Journal

MAY 1972



Guest Editorial



My first exposure to Macdonald College was a drive by the Campus on the Lakeshore Road as a young boy. I remember being impressed by the colourful flower gardens and by the uniformly red-tile roofs covering one brick building after another.

After having spent five years here as a student, this red-tile picture is still Macdonald College's most distinctive quality. Reflecting on these past five years, it is important to examine how we, as graduating students, have changed during our stay at Macdonald.

Freshman orientation in 1967 brought together a large group of apprehensive but friendly individuals from various backgrounds to begin year one of a five-year B.Sc. (Agr.) program. Many students from the Montreal area (especially the West Island) were joined by their peers from rural areas of Quebec, a few Ontario natives and, as always, a Maritime Provinces contingent. As became apparent to all of us, the international student is an integral member of the Macdonald Clan and we soon got to know West Indians, Indians, Africans, and South Americans.

Most of us were unsure of exactly what to expect from university and our backgrounds differed greatly. What was common to all of us was a tremendous potential energy which was ready to be directed. In a realm where the unknown ought to be assailed with all the human faculties, many of us were too concerned with carrying home in black and white what we heard in lectures. The basic principles of science, which in retrospect are so crucial, were spoon-fed to us in lectures and recipe labs. Consequently, many of us passively sat through the various procedures which were called university but which so resembled high school. Whatever energy was spent on school work was expended on conforming with disciplinary and other requirements, not in gratifying our own curiosity about the subjects we were studying. Education can not be, and has never been, a matter of obedience.

What we did direct our energies into, though, was getting to know our classmates and this we did with admirable enthusiasm. Countless hours of playing cards in the coffee shop, fooling over our homework in the library, all night talk sessions and mischief in residence made close bonds between new friends. Unfortunately, final exams severed some of these bonds and a smaller second year class returned in 1968 as "old hands" at Macdonald College.

From second year until graduation, we became more adept at mastering the school situation or as the cynic says "playing their game". We became accomplished administrators of our time, deploying less and less of it to menial academic tasks and more to doing what we wanted — usually just being with friends, exchanging lies and learning more about each other. Does this facility to accommodate ourselves to fulfilling the college's requirements indicate that we are educated? Or simply that we follow the rules, so it's time to pass Go and collect $200.

We entered on the bandwagon of enthusiasm for the merits of university education in order to get a better job. We graduate this year to find that the employment situation is as limited for us as for high school graduates. Where is the advantage? Certainly the advantage lies in individual maturity. Despite the somewhat cloistered — although unquestionably beautiful — atmosphere at Macdonald College, I'm sure every graduating student recognizes the growing up he or she did while at college. We became familiar with different kinds of personalities in both our peers and our professors. Most important, we began to get to know ourselves and realize our abilities and our limitations. Hopefully we learned to laugh at ourselves while admittedly going through the motions during that last term before graduation.

Whether it be cheering at a football or basketball game or getting together over a few beers at the Bar Disco, we became aware of ourselves as a community, and we value highly the easy, good times we shared. Besides the good times were the occasions where a group effort accomplished a lot. Royal

and Winter Carnival as well as the Dram were all student efforts which were fun for the workers as well as the participants who reaped the final product.

Rather than a specific professional training, I think we offer prospective employees an ability to deal with problems reasonably intelligently and to get along with our associates.

Jim Guild,
B.Sc. (Agr.) '72.

Guest Editorial

What is a Mac Grad?

This month I will be a full-fledged Macdonald College food science graduate. So . . .? What does that mean? I've studied all the necessary background sciences such as chemistry, physics, mathematics, and biology. I've investigated the specialized areas of knowledge such as foods, nutrition, teaching and the art of managing money and personnel. But this is only the very beginning. These areas are only those that can be evaluated and a pass or fail grade given. There is a much wider scope of learning available at Macdonald that is not offered at a large, bustling university.

The years spent at university appear, to the outsider, as very comfortable years. The student is instructed on what to learn and is given an evaluation date. For the academic information needed for a degree this is all there is to college. For the student who wishes to grow, mature, and try out new ideas, university is the time to do it.

The young freshman at Macdonald is entering a functioning, viable system. Classes, labs, and activities go on without apparent rhyme or reason. Then suddenly, after cautiously attempting to participate in the activities around you, you find that you are no longer a freshman, but a member of Clan Macdonald.

The time spent at college is invaluable. Friendships develop as you live, eat, work, and play within the same community. Some of these friendships last through time and distance. There is time during these years to learn — to learn how to plan, to manage time and energies, and to learn acceptance of others as individuals, each with something to contribute to life. This learning takes time and patience, but is often not noticed until . . .

There comes a time, a trip to home and family, when the realization that you no longer live there comes to you. You are an individual, very much on your own. Somehow this is not as frightening as it first appears.

A moment of thought brings to mind the fact that you really have been on your own within a small community and you have survived the ups and downs. During your college days you are given the responsibility of deciding your own lifestyle, values, attitudes and destiny. Opportunities abound for you to try them out for yourself in a small way. If they don't work, there is time to adapt, to change and to learn more.

Then suddenly the graduate stands at the doorstep of the busy, bustling world — very much alone, but well prepared to apply the knowledge learned. Whether you enter the field of community nutrition, hospital work, extension work, food management, or work in a commercial operation, there is the comforting thought that you have the knowledge and ability to do the job. You know that with your degree comes the knowledge of those that preceded you and of your own experience.

Barbara Beal,
B.Sc. (F. Sc.) '72.

THE FUTURE OF SILAG

Silage production, harvesting, storage and utilization were discussed by silage research and development scientists at the International Silage Research Conference held in Washington, D.C. during December 1971. The objective of this article is to summarize some of these findings which relate to feeding dairy cattle in eastern Canada. Some results published since that time also will be included.

Corn and legume-grass silages were the major subjects reviewed at the Conference but, at the same time, there was considerable interest in high moisture grain corn. Corn silage harvesting has doubled from 1959 to 1969 while the amount of hay cut has not changed or even decreased. Many of the advantages of corn silage probably have been responsible for the great interest in this crop. These include: ease of handling through mechanization, adaptability of this crop to ensiling, palatability and yield potential. Corn silage, yielding 20 tons per acre, provides twice as much energy as grain corn at 100 bushels per acre and considerably more than alfalfa-grass mixtures, although the latter yields more protein.

Corn silage also has problems, such as erosion by silting of corn land which could endanger streams and the risk involved in growing one crop suggests that this risk should be spread over several crops. Corn blight is another disadvantage, although this problem may have passed. Recent studies have shown that blighted corn, fed to pigs, rats, and rabbits, resulted in lower nutrient digestibility than normal corn and required seven per cent more feed per pound of gain but rates of gain were similar. No other problems were observed. Apparently energy utilization is decreased by blight.

Crops should be harvested at stages of maturity associated with optimal yield and quality. Best corn silage yields are obtained with the early to late dough stages (Table 1). From the standpoint of energy intake, corn silages from the dough to dent stages were similar. Other studies have shown that the dry matter content should be within the range of 30-40 per cent. Reduced intakes have been observed with high dry matter silages, while preservation problems occur with the low dry matter material. These would include seepage losses as well as unknown factors which restrict silage intake. Corn silage at 35 per cent dry matter is at the optimal stage since animal performance is maximum, yields are near optimal, and there are few difficulties with preservation.

Alfalfa silage is increasing in use and is probably associated with the decline in weevil activity and/or the development of tolerant varieties. Early-cut hay-crop silage of high moisture content is not readily accepted by the animal. This can be overcome by adding grain, either at the time of ensiling or when fed, or by wilting before ensiling. The most effective method is to wilt to a moisture level of 55 to 65 per cent. This will minimize the fermentation losses due to seepage and gas formation (less CO_2 is produced) and feed consumption and milk production generally are highest with this degree of wilting. Dry matter losses are quite low with this method: wilted silage, 13-15; unwilted silage, 17-20; barn-dried hay, 15; and field-cured hay, 21-27 per cent loss of dry matter.

To stimulate the most desirable fermentation in the silo, an anaerobic or oxygen-free atmosphere is necessary. The silo should be filled rapidly, ensiled at a sufficiently high moisture content to allow exclusion of air, and packed. Too low a moisture content results in a silage which is too fibrous and allows more air to remain within the silage. To reduce the avoidable ensiling losses, forage should be pre-wilted and chopped. Chopping or lacerating the forage in the field alters the physical conditions and biochemical reactions in the plant and establishes anaerobic conditions much faster. Lactic acid production is increased while the formation of volatile fatty acids is limited, especially butyric acid which is a good indication of poor fermentation. Oxygen is detrimental because it extends plants respiration and the accompanying aerobic fermentation reduces plant substrates, promotes growth of yeasts and moulds, and decreases animal acceptability. Such fermentation results in much higher temperatures within the silage and heat has been shown to decrease the digestibility of protein.

Numerous additives or agents have been tested for their ability to improve preservation. Generally these are needed only when the silage moisture content is over 65-70 per cent and offer no benefit to wilted silage. Only those additives which appear feasible will be discussed. Urea or non-protein-nitrogen-containing compounds have been successful with corn silage but urea should not be used

SI DAIRY CATTLE RATIONS

when the moisture content is less than 62 per cent. Selection between these compounds should be based on cost. Adding 10 pounds of urea to a ton of corn silage allows for a decrease in the protein content of the concentrate ration from 18 to 13 per cent. Molasses has been added to immature, high moisture forages and resulted in increased lactic acid formation and reduced dry matter losses. Whey is another possibility as long as minerals are added as a buffer. Grains may be added and will serve as a substrate for lactic acid production. Inoculums of lactic acid organisms have reduced dry matter and protein losses as well as increasing the acidity and silage quality. One of the most practical means of minimizing initial oxidation losses and preventing multiplication of protein-degrading and butyric acid-producing organisms appears to be the use of organic acids at ensiling. Silage pH is lowered to a level which is not tolerated by these micro-organisms. Although unconfirmed, propionic acid may be useful in this manner.

Formic acid, at 10 pounds per ton, has improved the nutritive value of direct-cut silage so that it equals or surpasses wilted silage. It has reduced silage pH and ammoniacal nitrogen and limited the production of volatile fatty acids so that dry matter intake is not depressed but, yet, is sufficient for good preservation.

Corn silage provides a forage of high energy content while legume-silages are rich in protein. Recent studies in this Department have shown that mature sheep consumed as much digestible energy from 36 per cent dry matter alfalfa-timothy silage as from 33 per cent dry matter corn silage but required 1.38 times as much dry matter to do so. Digestible protein intake was three times higher with the wilted silage. Intakes of 21 per cent dry matter corn silage were much lower. This suggests that a combination of the wilted and higher dry matter corn silage may be more desirable although previous studies have shown that either silage will support high level milk production.

The question, thus, becomes: how much corn silage can be included in a dairy ration? Corn silage, as the only forage, is feasible but requires greater care in supplementation by the rest of the ration. This is especially true for protein, calcium and phosphorous. For maximum prolonged milk production, the total ration must be balanced. Therefore, high corn silage rations will require concentrates of higher protein, calcium and phosphorous levels. Because of the differences in energy concentrations, less concentrate is needed to supplement corn silage than legumes or grasses. Corn silage is low in protein and these minerals and, therefore, the balance of these nutrients is quite important. In addition sulfur supplementation may need consideration when urea is included in the ration or iodine may be deficient when high levels of soybean meal are included in the concentrate. Many studies have reported the successful use of corn silage as the only forage over several lactations but other studies have shown an increase in the incidence

TABLE 1. Yield characteristics of corn harvested at different stages of maturity (Blazer *et al.*, Virginia).

Grain maturity	Dry matter	Dry matter yield	Ears	TDN	Intake lb/100 lb wt	TDN intake lb/100 lb wt.
	%	tons	%	% as fed		
Pre-milk	22.4	3.7	25.1	15.7	1.62	1.13
Milk to dough	26.1	4.0	42.8	18.0	1.84	1.27
Dough	31.9	4.5	58.3	21.4	1.73	1.18
Hard dough	37.5	5.8	65.4	25.5	1.89	1.29
Dent to glaze	46.8	6.0	62.1	32.8	1.87	1.29
Mature	54.4	8.0	64.9	33.2	1.84	1.12

of ketosis or acetonemia with this feeding program. It is apparent that hay should be included in the ration of dairy cows receiving low dry matter or poorly preserved corn silage but no benefit in milk production occurred with 30-35 per cent dry matter or properly preserved silage.

The use of corn silage as the only forage should be practiced only under the best management conditions. Such a feeding program should only be considered when the dairyman is certain that he can balance his total ration for protein and certain minerals, specifically calcium and phosphorous, and that he can attain a crude fiber intake of at least 16 per cent of the dry matter so that fat test is maintained.

High moisture grains were discussed. It became obvious that a dairyman should consider grain corn only after he has sufficient corn silage acreage to meet his needs. Shelled corn and corn and cob (or ear corn) are equal in feeding value for dairy cattle. The cob fraction will increase the dry matter yield per acre by approximately 20 per cent and is quite useful where concentrate intakes are high. It provides for a "lighter" ration and is useful in maintaining desirable crude fiber intakes.

Grain corn should not be harvested before the kernel moisture is less than 35 per cent moisture. Maximum yields will then be attained. High moisture corn should be processed for dairy cattle either by grinding or rolling. With ensiled grain, corn and cob should be processed before adding it into the silo.

The use of organic acids in the preservation of high moisture shelled corn has proven to be successful over two year studies at the College. In our second and recently concluded experiments, dairy cows were fed concentrate rations comprising only corn, soybean meal, molasses, urea and a mineral supplement. Propionic acid-treated corn was compared to dry shelled corn or corn and cob meal for the first 305 days of their lactation. The three corn rations were similar in milk-producing ability and fat and protein tests, indicating that the treated corn can be used by high-producing cows for at least one full lactation without adverse effects.

High moisture barley is as efficient as air-dried barley. In fact, experiments with beef cattle have shown that steers fed high moisture barley will go on feed faster, make greater early gains and show no tendency to go "off-feed" as has been demonstrated with ground dry barley.

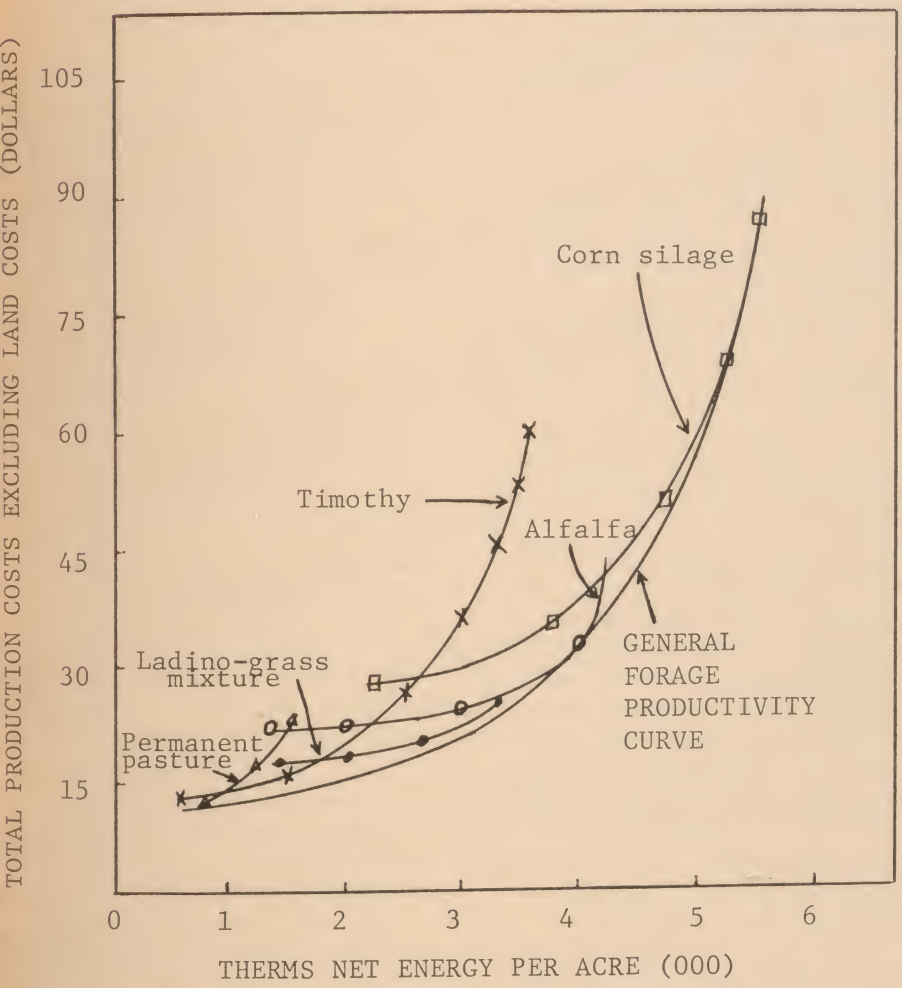
The decision as to harvesting grains as dried or high moisture grain and the method to use for maximum preservation should be based on economical and physical factors rather than feeding value.

Forage crops account for 25-30 per cent of the cost of milk production. This cost can be minimized by: reducing unit costs through increased yields, reduced harvesting and storage losses, and changing to higher yielding forage crops; increasing quality which could increase milk produced or reduce the protein supplement requirements; and substituting to lower cost forage crops. Harvesting 500 or 1,000 tons of silage reduces the investment and annual costs of harvesting, storing and feeding of one ton by 83 and 67 per cent, respectively, when compared to 250 tons. When alfalfa was fed as silage rather than hay, feeding times were reduced by 25, 40 or 60 minutes for herds of 40, 80 or 120 cows. For these herd sizes, feeding corn silage and haylage rather than corn silage and hay reduced growing, harvesting, storage and feeding costs by $279, $1,219 and $2,309, respectively. Such systems may require a high degree of mechanization. It was found that a dairyman could afford to convert from a medium to highly mechanized system with 90 cows when labour was valued at $2 per hour or 60 cows with labour at $4 per hour. Labour costs are the second major cost of milk production.

Economic studies indicate that high corn silage feeding should be practiced with highly productive cropland and that, to be competitive with cash crops and cattle feeding, maximum acreage of corn silage must be utilized in combination with an efficient and economical dairy operation. With moderately productive cropland, the economic gains of high corn silage feeding are not as great as in the first case but reduced feed costs do exist. In the case of less productive land, approximately 30-50 per cent of the land should be harvested as corn silage which should be combined with alfalfa for minimum cost.

Studies from New England, where land prices are high, show that high forage yields per acre are

igure 1. Total production costs per cre associated with specified rates of utput per acre through alternative rops and fertilizer practices (Storrs gric. Exp. Sta. Bull. 352, Univ. of onn., 1960).



necessary. However, production costs also increase. Figure 1 shows the change in production costs and the shift to different crops as energy yield per acre was increased. The rapid increase in costs at high output levels is also evident. Lowest possible unit costs were obtained with ladino-grass mixtures or alfalfa in rotation with corn silage at yields of 2-3½ tons of hay equivalent per acre. Corn silage with heavy fertilization offered the best alternative at high yields (3½-4 tons hay equivalent per acre).

Conclusions

The current trend in forage production is towards the ensiling of whole corn or hay-crops as silage of high quality. Best quality is attained by using methods which allow an anaerobic or oxygen-free fermentation. Whole corn or hay-crops should contain 60-70 or 55-65 per cent moisture, respectively, and ensiling and filling of the silo must be done in a manner which minimizes the entrapment of air within the silage. A few silage additives have been shown to assist preservation. Urea and other non-protein nitrogen compounds have proven successful with corn silage. Molasses, grains, etc. will serve as a substrate for lactic acid production during the fermentation of hay-crop silages and formic acid allows direct-cut hay-crop silage to equal wilted silage in nutritive value.

Silage, as the only forage, offers many advantages to dairymen including an opportunity to spread machinery costs over a greater volume of feed and automated feeding. This feeding program will become more widespread as the use of complete feeds or all-in-one rations increases in the future. Forage and concentrates would be mixed at a constant ratio before ensiling or as silage is removed from the silo and labour would be reduced since cows are allowed the forage-concentrate free-choice. Cows would not be fed individually or in the milking parlor. Such a system should be practical for large and small dairy herds.

Although corn silage has been fed for many lactations as the only forage source, it would seem that dairymen in eastern Canada should continue to utilize a combination of corn and legumes wherever possible. The problems of protein and mineral balance are not as complicated. With highly productive cropland, corn silage should comprise 70 per cent of the forage dry matter to minimize feed and production costs. With less productive land, more use of hay-crops can be practiced. Corn should be harvested as grain corn only when cropland is not restricted. Maximum utilization of corn silage should receive first consideration.

Dr. G. M. Jones,
Department of Animal Science.

The Insects They Complain About

During 11 years of answering queries on insects from the general public of this area, and 12 years in other areas, certain ones (insects, not people) have been noted time and time again. It is because of this regular recurrence of these same pests (again the insects, not the people), that this article is written. I hope that it may be of some help to those who find these pests a problem.

Before detailing the culprits, I would like to make it clear that most insects are not pests. In fact, in this area, the proportion of pests to the total number of species is probably not greater than two per cent. Think of that the next time you almost unconsciously reach with your foot to step on an insect as soon as you see it. Many species are helpful, and affect our lives, directly and indirectly, in more ways than the most lively imagination could devise.

Another point must also be made. In the present period of increasing awareness of the environment, of conservation and of pollution, it is accepted that pesticides are among the most dangerous of environmental pollutants. Some birds have been brought near to the point of extinction by pesticide use, even though the area of such use has been far removed from the normal habitats of the birds. What the ultimate effects of some of these chemicals will be, so far as the human population is concerned, is largely unknown, although some scientists have painted a bleak future indeed. And — who is the worst offender in misuse of pesticides? No, not the chemical companies or the farmers, it is the "suburbanites". How many of you always take the trouble to read the fine print on pesticide containers to find out what you are using, or what precautions and directions the manufacturer has listed? These are for your personal protection as well as for protection of the environment. Next time, please read the whole label, even if you do have to get out your glasses first. I do.

Perhaps by now you are so discouraged that you have decided to let the pests alone. If so, I don't suppose there is much use in reading the rest of this. I don't think you should be so disheartened though. I believe we will have to use pesticides of some form for many years to come. Our main concern should be to make the wisest choice and to follow the directions as carefully as we can.

Now, concerning the insect pests which have caused the most trouble, let us see what we can do about them. Some of these pests are outdoor pests and cause trouble only during the summer months. Others are household pests, which you may find at any time of the year. Since summer is on the way, we will look first to the outdoor pests.

Wasps and their Relatives

Call them hornets if you like but a hornet is the name used for the particular kind of wasp. If your problem is with bees, either bumble bees, solitary bees or honey bees, I will mention them later.

Most wasps are not noticed until August, or even later. By this time their paper nests will be large and the number of wasps per nest will be great. In early summer the queen wasp starts alone to build the nest, then raises a few worker wasps to help her. The population soon increases, and so does the size of the nest. This is when you see either the nest or you see numbers of wasps coming and going, and you wonder what to do.

First of all, find out exactly where the nest is, and, if possible, how it is attached. It may be hung by a single stalk under the eaves on a building, or it may be built into a tree or hedge and attached in many places. Then, stay away from it during daylight. Dusk, after the wasps have stopped flying but before it is too dark to see what you are doing, is the only time to approach and take care of a nest like this.

If the nest is attached by a single stalk and can be reached easily, simply use a hoe and drop the whole nest into a plastic garbage bag (which you then seal up as quickly as possible before the wasps get out). Don't throw the bag in the garbage or attempt to burn it: a better plan is to crush the contents, either by stamping or piling on heavy weights (I prefer thorough stamping), then leave it a couple of weeks and repeat before placing it out with the garbage.

If you cannot remove the nest easily, insecticide treatment is in order. Get an aerosol can of insecticide containing "chlordane" or "sevin" and at dusk, give the entrance to the nest a 10-second burst from four to six inches away. Direct the spray into the entrance as well as you can. Then get away from it. One application is enough, although it will be about two weeks before you see the last of the wasps, since there will be some new wasps emerging from cells inside even after the others are killed. Then you can remove the nest without much difficulty.

If you find either wasps or honey bees entering a hole behind a finish board, leading to a concealed nest, use the insecticide treatment at their entrance. After a couple of weeks or when no more insects are seen coming and going, seal the hole.

f the nest is in the ground, the problem is probably bumble bees or solitary bees. The best treatment is to use the insecticide aerosol at the entrance, then close the entrance some days later.

Just a word of caution. Remember that all of these insects perform a valuable service in pollinating many plants. Don't kill them just because they are there, but only when they constitute a hazard. Another word. The insecticides mentioned here, particularly chlordane, are more poisonous than DDT, and possible side effects of a long term nature are not known. Use them only when necessary.

Earwigs

Those people who have moved to this area from Europe are familiar with earwigs. Since they (the earwigs) arrived in this area only a few years ago, many people, who have lived here a long time, do not know them and tend to become somewhat agitated when they see one either indoors or outside.

Actually, earwigs probably do more good than harm in areas where there are not too many of them. However, what usually happens when an introduced insect finds a situation to its liking, is that it tends to build up to very high population levels, and this is what has happened with the earwigs here.

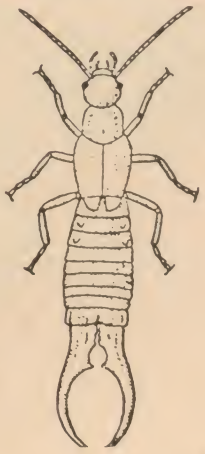
The "pinchers" on the rear ends of these insects are harmless, and they really don't crawl into people's ears. This is just an "old wives' tale". Normally, they eat both plant and animal food (usually soft-bodied insects such as caterpillars and aphids). They feed at night and usually shun bright daylight. During the day, they can be found in protected, dark places. Unless you find they are injuring plants, ignore them. They won't go away, but they should not cause trouble either.

If you see plant injury and can find numerous earwigs outside, you may wish to use an insecticide. Since they are difficult to kill, it may be necessary to use "chlordane". Try to follow manufacturer's directions; try to concentrate the chemical only where it is needed; and, by all means, use only a preparation that is specified as safe on plants. Do not use chlordane on vegetables or on any edible crops.

Where earwigs are numerous, they have an annoying habit of finding their way into houses. This is when most people become aware of them. Treatment of the inside of the house is rather pointless. Instead, look around outside and try to find out where they are getting in. They fly very little, so look around the foundation, as they will be crawling in. When you find the place, either block it or spot-treat the area with chlordane. Keep children and pets away from chlordane-treated areas.

Ants

As outdoor pests, there are a number of kinds of ants which may build underground nests and



Earwigs

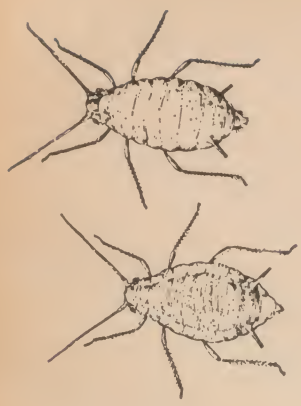
form mounds with the excavated soil. Unless these are in your lawn or in a perennial garden, forget about them. If the mounds create a problem, these can be treated with chlordane. All of the entrances to the underground galleries are in the mound, so the ants coming and going will carry the chemical deep inside and eventually the whole colony will be wiped out.

Unfortunately (like the earwigs), ants often find their way into houses. Ants, however, have a purpose in mind: they love sweet materials, and their objective in the house is to raid the sugar jar or anything else which is sweet. In this way, they can be real pests. Again, there is not much point in treating inside the house as the ants are coming from a nest outside the house. It will be necessary to find out where they are getting in and to spot-treat that place, or to treat the whole colony in the nest. Finding the nest from which the ants are coming may not be as easy as it sounds. Unless the mound is obvious, it may be necessary to observe the ants closely and follow them back to the nest.

Aphids

Plant lice can't possible cause injury to people. Unlike the last two pests they don't come into houses either, at least not by themselves. You may carry them in on an infested plant or on cut flowers. When brought in accidentally, they may become established on some house plants. Usually though, the problem is outside and on a very wide variety of plants.

Aphids are small, soft-bodied insects, either winged or wingless, and vary in colour from red to green to brown to black. Unlike most insects, aphids in summer



Aphid

give birth to living young — all females. Since an aphid can mature and reproduce in about two weeks (less in hot weather), population explosions are not uncommon. When they get crowded on a plant they produce winged aphids and these spread to other plants. They feed by inserting their tiny beaks and sucking out plant sap. Some kinds carry virus diseases of plants, others cause twisting, malformation or discoloration of plant parts.

Spraying with the insecticide "malathion" is effective against most aphids, if you make sure to spray growing tips and undersides of leaves, where most of the aphids are to be found. Since they do multiply so rapidly and spread so quickly, it is advisable to watch the plants and spray again if necessary. It is not uncommon to make three to five applications per season.

There are many insects which feed on aphids. Lady Bird Beetles are very helpful. If numerous, they can destroy the aphids as fast as they reproduce. Lady Bird Beetles are never harmful and should be protected.

Now what do we do about the most common indoor pests. Some of those already mentioned may cause trouble inside, but these which we will consider now never cause trouble anywhere but inside (at least to humans).

Sawtoothed Grain Beetle

Of all the pests attacking cereal foods (from breakfast cereal to flour, bread or cake, anything made from grains and even nuts) the most common one is the Sawtoothed Grain Beetle. It gets its name from the saw-toothed areas on its sides: it can't saw anything. It is difficult to get rid of, since it can feed upon such a wide range of food materials. It is tiny, less than ⅛ inch long, so you may have difficulty in being sure of what it is. There are several other small beetles which may attack some of the same type of products, but don't worry about that. The control methods are the same for all of them.

First, try to find out the source of the beetles. The chances are that they may be confined to a single product. If so, throw it out. If you continue to find beetles, check everything that they might be in. Also, remove from the shelves all foods and utensils and wash the shelves. When dry, use one of the aerosol insecticide preparations which is specified for "household insects" (generally with "pyrethrum" as one ingredient). Spray particularly the cracks behind and at the ends of the shelves. Put on fresh shelf paper and replace articles on the shelves. Be very careful not to contaminate any foodstuffs or utensils.

Above: Ant; Below: Adult Carpet Beetle.

arder Beetles (or Dermestid eetles)

hese are much larger, almost ⅛ inches long. Their food references are quite different s they feed mainly on products of nimal origin, including powdered ilk, meat products, animal skins nd insect collections. There aren't any stuffed moose heads left round these days, but this used o be one of the main sources of nfestations in houses.

o control them you must do uch the same as for the Saw-oothed Grain Beetle. Find out here they are breeding and ispose of the infested material. pray as for the Grain Beetle, sing the same preparation, but pray as well, the cracks in the aseboards of the room where ne pests were found.

arpet Beetles

your carpets are made of some ew synthetic material, you houldn't have any trouble with nese beetles. They eat carpets made of materials of animal origin, such as woollens (although cereal products are sometimes attacked as well). Only the larvae, small, hairy grubs, cause damage, usually during the winter. There are three species found in Canada: all are accidental imports from Europe.

If you find beetles or grubs in cereals, use the same treatment as for the Sawtoothed Grain Beetle.

If you do have woollen rugs and find beetles or grubs (the beetles may be wandering around anywhere; the grubs are deep in the pile or underneath the rug), the rugs can be treated by spraying the underside with an insecticide preparation which is specified for "household pests". If rugs are vacuumed frequently, occasionally on the underside too, you should not have trouble with carpet beetles. While vacuuming, be sure to get the lint in cracks in the floor and around the baseboards, as these may serve as breeding areas for the beetles.

Above: Larder Beetle Larva; Below: Dog Flea.

Fleas on Pets

If you have dogs or cats or both, you will likely have a flea problem sooner or later. Dogs and cats each have their own species of flea, but either of these will bite humans if they are hungry enough. Fleas frequently are more troublesome in houses in the late summer and early autumn.

Many people protect their pets with flea collars. These are generally effective in killing the fleas on the animals. What most people do not realize is that fleas in the immature stages are never on the animals and newly matured adult fleas are not either. They are usually found around places where the animal sleeps and failure to treat these spots could mean that the flea infestation can be prolonged indefinitely. If houses where pets are kept are left vacant for extensive periods, such as a long summer absence, or between sales, a flea problem may be expected when the house is reoccupied. This is because many flea larvae may have developed into adult fleas. They will all be hungry and will not be too particular about the source of food — dogs, cats or people.

If you notice your pet acting strangely, as though there was something biting it, there may be something biting it — fleas. Treat the animals to flea collars but don't forget to treat the animal's bed and the surrounding area too. Use a commercial flea powder, available at most hardware stores. It is a good idea to vacuum thoroughly following the insecticide treatment as some insecticides may only knock out some insects. You can use the powder directly on dogs but not on cats. Don't forget that cats lick their fur frequently. Addition of flea powder to the cat's diet is not recommended.

These are just a few of the pests that plague us. There are others, but these are the pests that you have most frequently complained about. I hope the information will help you.

Dr. V. R. Vickery,
Lyman Entomological Museum
and Dept. of Entomology.

The Family Farm

Published in the interests of the farmers of the province by the Quebec Department of Agriculture and Colonization

(The following is a translation of a speech made by Mr. Normand Toupin, Minister of Agriculture, to the Meat Packers Council of Canada at the Chateau Champlain in Montreal on March 5, 1972.)

Mr. Chairman: It was a pleasure for me to accept your invitation to come and talk to you today at your annual meeting. I am delighted that you have chosen Montreal to hold your 1972 meeting. You are and always will be welcome in the Province of Quebec.

There is no doubt that your organization and your enterprises play an important role in the country, both in the industrial field and in agriculture; and Quebec — like all the other provinces — benefits from your economic contribution to this great meat producing and processing sector which is, moreover, the biggest food industry in Canada with annual sales exceeding two billion dollars.

In your letter of invitation you asked me in particular to give my views about two specific aspects of Canadian agricultural policy, namely **the regulation of the markets for farm products and the program to buy up small farms.** As a matter of fact these two subjects are now the object of earnest discussions between the provinces and the federal government and are thus decidedly topical. But, unfortunately, we have not yet managed to reach final agreement on these two very important matters for the development of agriculture in Canada. We are still negotiating with regard to the control of the egg, grain and broiler markets and we are in uncertainty about the small farms purchase program.

But before dealing with these two aspects of Canadian agricultural policy in greater detail, I should like to describe briefly the chief constraints to which Canadian and, in particular Quebec agriculture is subject and the general aims we are pursuing in connection with the development of agriculture in Quebec and Canada. My purpose in doing so is to put into a more realistic context the two main aspects of agricultural policy on which I am going to dwell at greater length.

A. The Main Constraints on Canadian and Quebec Agriculture

Like world agriculture, Canadian, and in particular Quebec agriculture, are subject to constraints that they cannot escape and of which some threaten to reduce many farmers to bankruptcy. Hence a knowledge of these restrictions seems to me essential for the purposes of this brief talk on agricultural policies. There are five principal constraints.

1. Technological development in agriculture causing rapid progress in production. This progress has had two marked effects: increased productivity (up to twofold or even threefold) leading to surpluses of farm products on local and world markets and a need for too big a capital investment which are forcing many farmers to quit and join the ranks of the unemployed or recipients of social assistance, leaving hundreds of thousands of acres unproductive.

2. Difficulty for eastern provinces to obtain feed grains and cereals at prices which are competitive compared with those paid in western provinces.

As long as the world market for grain was at a reasonable level, western Canadian farmers took little interest in meat production and eastern farmers could produce meat under reasonable economic conditions. But, for some years past, the situation on the world grain market being somewhat unfavourable, western farmers have chosen to use surplus grain to produce meat. Needless to say, they can obtain grain cheaper than eastern farmers can — hence the present almost untenable economic plight of Quebec producers. It seems evident to us that such a situation could not continue under a system of free movement of farm products in Canada because it is completely contrary to a genuine national marketing policy; to wish to maintain it would be almost to invite ridicule.

3. The Decline of the export market

Export markets are becoming more and more protectionist, and as the so-called developing countries intensify their agricultural production, competition is becoming increasingly stiff. We must, therefore, think about developing our internal markets and produce more at lower cost if we want to hold on to our present export markets and conquer new markets.

4. Exaggerated influence of slight surpluses on prices

In practice and as a rule in our modern agricultural economy, one finds that the price at which one can sell the last five per cent or even the last one per cent of a given product determines the price for the total quantity of the product. If the total supply of the product matches the demand, the prices

re reasonable but a small surplus s likely to make prices fall and it is early always the producer who oots the bill.

. The incidence of poverty in griculture and especially in rural reas

he Task Force on Canadian griculture set a gross farm income f $5,000 as the figure below which ne income is considered to be elow the threshold of poverty.

f the 70,000 farms in Quebec, nly about half (35,000) have sales f products worth over $5,000. hus real poverty does exist in ural areas. The latest statistics stimate the number of Quebec armers receiving permanent or emporary financial aid from the epartment of Social Affairs at early 25,000.

his situation is intolerable and emands immediate redress.

. General Aims of an Agricultural olicy

. Regionalization and diversifica-on of farm productions

istorically, Quebec has mainly oncentrated on dairy farming. must now diversify its farm roduction if it wants to "stay in ne picture" of Canadian agriculture, s follows: a) grain production;) beef and pork production;) market garden production,) industrial crops production.

his diversification must be rought about with due regard for limates and soils.

2. Re-allocation of resources

Quebec must use all the resources provided by its natural milieu: — reforesting of land unsuitable for agriculture; development of tourism in rural areas, etc.

3. Regulation of supply, and market equilibrium

Sound supply management and market equilibrium imply a necessary minimum of supply control in relation to demand. Such management also implies agreements between provinces and an aggressive export policy.

4. Intensification of processing enterprises

Processing enterprises remain the indispensable factor for the development of the primary and tertiary sectors. Their development implies definite policies in this field.

5. Development of research and training of agricultural technologists

Research is conducted by both levels of government. If it is to produce the desired effect, co-ordination and a policy of priorities are necessary.

6. Social policy suited to agriculture and the rural sphere

It is necessary for us to have a social policy for farmers but it must be suited to the real needs of their situation. Specifically, it must avoid being a cause for abandoning the rural sector, reducing the number of efficient farmers or overlapping with social policies in general.

C. The Marketing of Farm Products

— Farm products marketing poses a serious problem in Canada and in each province.

— This problem also exists very acutely at the international level. Our participation in the international discussion at Paris brought it home to us.

— What do we mean by a genuine marketing policy? As we see it, it calls for the following components: 1) efficient and well-organized farms; 2) fair prices to farmers; 3) a Canadian market free of all constraints and obstacles; 4) a sound policy of research for new products and new markets; 5) a well-structured and efficient processing industry; 6) prices which the consumer can afford.

— We believe that both levels of government have a part to play in achieving these aims, particularly as regards supply management and interprovincial trade.

— The provinces must continue to organize (as in fact they are doing) within their boundaries the marketing of products by: developing marketing enterprise; producers' boards; production quotas; marketing boards, etc.

— The provinces must next agree among themselves about market sharing and all problems relating to marketing and they must be prepared to collaborate with the federal government in matters within its jurisdiction.

— the federal government must devise policies concerning inter-provincial and international trade

which come under its exclusive jurisdiction. In this field it may proceed under "Bill C-176".

— Specifically, marketing agencies set up under that Act would be responsible for administering agreements between provinces. These agencies would also see to disposing of surpluses, with the provinces delegating a minimum of power to the federal government in order to give the national agencies the necessary powers to fulfill their role properly.

Small Farms

Reallocation of resources to the program for buying up small farms

The program put forward by the federal government calls for:
1. Transfer of farms
2. Purchase, sale and renting of farms
3. An up-to-date listing of farms for sale
4. Creation of a soil bank
5. An annuity and pre-pension plan
6. This program would be administered by the Farm Credit Corporation.

Quebec's Position

Quebec is not opposed to the general principles of such a program any more than the other nine provinces are.

However, we are not in agreement with the terms and conditions of the administration of such a program, for the following reasons:
1. A number of provinces, particularly Quebec, already have such programs in operation.
2. The unilateral implementation of its program by the federal government presupposes an administrative team and a team of management specialists. Nearly all the provinces already have such teams. This situation would lead to duplication and overlapping.
3. The pre-pension and annuity policy would be bound to impinge upon the provinces' social policies and would thus involve difficulties of coordination.
4. Allocation of resources is a provincial prerogative and the farm purchase, resale and rental plan comes under that heading.
5. Farm management implies the orientation of agriculture.
6. The provinces have different needs and priorities; great flexibility is therefore called for in carrying out this set of programs.

As far as we are concerned, we suggest a basic federal plan which would leave the provinces to negotiate agreements according to their needs and also to negotiate the supervision and administration of the said program.

With respect to these two matters (marketing and the buying up of small farms) we are confronted with two theories. Are the provinces to become mere administrative regions or shall they continue to be stimulants to economic development of agriculture.

For our part, we have chosen the second standpoint. The provinces must continue to perform functions of legislation, agricultural planning, regional development and reallocation of resources.

The federal government has sufficient scope to play its true role within the jurisdictions which have more specifically developed upon it.

I should like to conclude with the following idea:

In the field of marketing and production control, all sectors concerned should work together — producers, processors, distributors, government.

New Folder on Crop Insurance

The Quebec department of agriculture has published a new folder explaining the protection offered to farmers by the Quebec Crop Insurance Board.

Entitled "Crop Insurance: for whom? why? how?" in the English version and "L'Assurance-récolte: pour qui? pourquoi? comment? in the French version, the folder has been distributed to more than 30,000 farmers in the province.

In this folder will be found full information about the services which this government board can render. The information is summarized under a number of headings such as "Crop Insurance what is it?", "for whom", "what are we insuring", "what risks are covered".

The folder also contains the addresses of all the regional representatives of the board and offers some information on how to fill out the forms. The folder is also available at the department's local and regional offices.

Right: A field of sugar beets on a Quebec farm. For articles on the sugar beet industry, see Page 16.

This view gives a good idea of the size and shape of many Quebec farms. What does the future hold for the typical Quebec farm is a question being given a great deal of serious consideration these days.

Quebec's Exhibit Attracts Attention at Horticultural Display

Some 600 delegates from Canada and the United States showed keen interest in Quebec's kiosk at an exhibition of Canadian horticultural products organized in connection with the annual meeting of the Fruit and Vegetable Wholesalers' Association at Toronto in February.

The kiosk featured a display of a dozen kinds of fruits and vegetables in over 30 different types of packaging.

The produce displayed — consisting entirely of Quebec products — was supplied by about 20 growers in the Montreal area.

The Quebec Department of Agriculture's Marketing division collaborated in this effort by looking after the renting of the required space and the Coopérative Fédérée de Québec saw to the organization and the display arrangements.

New Board of Directors for Quebec Sugar Refinery

The Quebec minister of Agriculture, Mr. Normand Toupin, has announced the appointment of a new board of directors for the Quebec beet sugar refinery.

The new board consists of Gaétan Lussier, deputy minister of agriculture, president; Marcel Ostiguy, member for Rouville, vice-president; Pietro V. Guerci, assistant deputy minister of Finance; Benoit Beauregard, president of Quebec Poultry Ltd; and Georges-Etienne Turcotte, general manager of the Coopérative Fédérée de Québec, directors.

A Crown corporation, the Quebec sugar refinery is situated at St. Hilaire in Rouville county. The plant has about 100 regular employees and engages a further 300 or so seasonal workers during the height of the beet receiving and milling period.

Slight Decrease in Quebec's Sugar Beet Crop in 1971

The Quebec Sugar Refinery at St-Hilaire in Rouville County produced 33.6 million pounds of sugar, 10,500 tons of beet pulp and 7,850 tons of molasses during the milling period which recently ended.

These figures for the 1971 season just released by the Quebec deputy minister of Agriculture, Mr. Gaétan Lussier, who is president of this Crown corporation, show a slight decrease compared with 1970 when the refinery produced 39.5 million pounds of sugar, 11,000 tons of pulp and 8,000 tons of molasses.

About 168,600 tons of sugar beets were delivered to the refinery by Quebec growers last fall. The milling period began on October 5 and finished at the end of January.

The quantity of beets produced per acre in 1971 was higher than in 1970 but their yield of sugar per ton was lower — 199.54 pounds as against 223.

Wet weather at the end of August and in September and copious applications of nitrogenous fertilizer are considered causes of the moderate yield of sugar.

This Month with the QWI

Very Special Fund

our Institute (**Canterbury, ompton County**) we have a irthday Fund which is kept eparate and used for our own njoyment. As each member has birthday, she puts a penny for ach year of her age in the special ank. When the bank is fed enough, gala party is planned such as ne one we had last October.

wo of our members were ap- ointed to look after the event. he hall was reserved and plans cheduled. The two members ent on a grocery shopping spree Sherbrooke where they pur- hased most of the food, then ese same two women decorated e hall, cooked the meal and rved it. One of them furnished l the flowers and the other made eautiful napkin rings using the /.I. colours and also made a vely three-tiered, decorated rthday cake.

ne tables were arranged in a square circle" with flowers and ndies on each table. The birthday ake was centred on a small table side the square. Each member ought a guest which made guests in all.

ne menu was as follows: Cold ast turkey, mashed potatoes, ixed peas and carrots, cabbage d pineapple salad, jellied salads, lls, pickles, celery, olives, apple e à la mode, tea, coffee and wine.

fter the meal, two of our members ere invited to stand beside the rthday cake while the President esented each one with a Life embership in the Women's stitute. The members expressed their surprise and thanks and several of the guests also expressed grateful thanks for the delightful party. The two members worked hard and long to make the party and supper so successful and accepted the thanks gratefully but the real thanks was the pleasure written on the faces of the guests. We know it was worth while and truly a work of love. We hope to carry on this project as we feel that "All work and no play makes Jack a dull boy" and a merry heart doeth good to all.

Talk Back from the Quebec Women's Institutes

During the past year the QWI entered into a Canada-wide program with the F.W.I.C., who furnished a questionnaire on Government Involvement in Agriculture. A study was made by each branch on government in agriculture, agribusiness, farm organizations, commodity groups, marketing boards and the consumers' needs. The answers returned were many and varied and told of the variety of regions in this vast province.

In brief, here are some of the results of the study: They thought that the role of government should be in the areas of research and study of agriculture; education — youth programs and farmers' programs with a good news media available to the farmers; marketing with research in new market possibilities and assistance in profitable marketing; direction in credit use, grants, zoning supervision and research. It was also felt that government should implement policies of farm organizations, should attempt to keep costs of farm machinery and materials in line with prices received. Keep the farmer on the land and help overcome rising unemployment figures. Listen to farmers' problems and ideas, assist with farm loans, animal health, bulldozing work, pension plans, crop insurance, conservation and environment control, protect farm incomes. Government should act as a guide but not as a master.

Institute members should encourage attendance at farmers' meetings — both members themselves and farmers. The Provincial Convener of Agriculture should attend Quebec Farmers Association meetings. Since the nest egg is gone from her former occupations, a way is needed for the Quebec farmwife to earn something for herself. For though there is a lack of financial gain from the industry and there is rising unemployment, the farmwife still keeps the home fires burning. She still acts as her own babysitter, laundress, cook, seamstress, janitor, veterinarian, bookkeeper and good cheer dispeller but ways and means and ideas must be found to enable her to earn something for herself.

Mrs. Gordon French,
Provincial Convener of Agriculture.

(The following is a condensed version [for reasons of space] of a broadcast written by Mrs. Gordon French, Provincial Convener of Agriculture, and presented on Sherbrooke's CKTS Radio.)

"Greetings from the **East Clifton** Women's Institute. Giving the broadcast today are Mrs. Montgomery of East Clifton and Mrs. Gordon French.

First Speaker: We wish to bring you a discussion on agriculture.

Second speaker: Agriculture! Huh! — some topic to choose. How many people are interested in agriculture these days? Not many, is my guess. For me it's a lost cause. Who has any interest in listening to someone talk about agriculture? Not me, for one.

First: I'm sorry you feel that way about one of our leading industries. Oh, by the way, could you lend me a pound of butter and a cabbage. I stopped at the store on the way over and they are sold out. They did have a few turnips and four quarts of ice cream left.

Second: The store is running out of stocks of vegetables, fruit and ice cream . . . I must get to the store while there is some left. What should we do about such a catastrophe?

First: I heard you say you were not interested in agriculture.

Second: I did, I'm not, but I do like to eat.

First: You admit then that you are a consumer of agricultural products. You seem to be very interested in agriculture right now.

Second: You win. But it is my bet that we do not produce even enough for our own consumption.

First: It is a fact that we need to import products that we are not able to grow here — tropical fruits and green vegetables in the winter months — and we do have seasonal shortages, such as butter.

A country usually exports those products which it produces in excess or which it can find a market for. Let's look at a few statistics on what we do export after we have filled our own bread basket. Agricultural products on the export market include: Meat; (frozen and fresh) worth $66,-040,000 or 53 per cent of Canadian exports of these commodities were from Quebec farms and processing houses. All livestock: $9,000,000 or 13 per cent of Canadian export. Dairy products: $96,460,000 or 36 per cent of Canada's exports. Eggs only $3,000, honey, $82,000, maple products, $74,400,000, vegetables, $2,370,000, hay, straw and forage, $2,597,100 or 63 per cent of export.

The net revenue from Quebec farms for 1969 was $229,000,000. They produced 2,028,000 tons of feed grains — 925,000 acres were planted to grains with 93,450 acres of grain corn increasing from 17,700 acres in 1961. There were 4,500,000 bushels of apples produced of which 302,000 bushels were exported. The number of pigs were at 1,879,000, a drop of 50,000 from the year earlier. Abattoirs did a business of $370,000,000, milk processing — $432,000,000 and poultry $114,-000,000.

Second: I'm convinced. I didn't realize that we had an agricultural business of that immensity. Do they have any organizations to represent them?

First: Commodity groups or producer organizations are still in the early stages here in Quebec. One of the first and possibly most successful groups has been the milk producers but they have had a long hard struggle on behalf of their members. The newly formed FEDCO are planning to get a better deal for egg producers. The apple growers hope to soon have an organization to intervene for better prices for them.

Over these groups is the Quebec Marketing Board where cases are considered and heard by representatives for the people, Government, law and consumers. (When this Board was organized, Mrs. Roswell Thomson, of Abbottsford, a Women's Institute member, was on the Board.) If a producer group think they are receiving unjust payment for produce and can justifiably state that such is true, this Board, taking into account the consumer, will negotiate for better prices.

Second: Are there other producer groups or breeders' clubs and, if so, what do they do?

First: There is the newly formed Quebec Livestock Breeders Club which will represent all beef breeders and the dairyman who has a few calves for sale. Its purpose will be to represent all these producers in the market place, to seek betterment of the industry and to accept or reject government help.

There are many breeders clubs, such as Hereford Breeders or Jersey Breeders, representing the foremost Canadian breeds with provincial and local clubs representing the best in production and quality. They seldom negotiate but are often asked by the Government what stand they would take if a grant was given to a certain part of the livestock industry. For example, at present their opinion would be pertinent to the Government grant just given to the Artificial Insemination Division to improve the quality of Quebec livestock. Their part is in the betterment of the breeds they represent.

Second: What is the Quebec Farmers Association? What strength as an organization does it have?

First: The Quebec Farmers Association is an organization of English-speaking farmers with headquarters at Macdonald College. They represent anything of interest to Quebec farmers. They have group life and car insurance and have represented the farmers in dealing with the Government and Marketing Board on several occasions. Whether the project is better milk prices, grants for fertilizers or saving the Morgan Arboretum from being destroyed by the Highways Department, they are concerned and active.

They have membership in the Canadian Federation of Agriculture, which is the overall producer group which carries the farmers' wishes to the federal government. They also work closely with the l'Union Catholique des Cultivateurs (U.C.C.), who have a membership of 40,000 farmers, and the Q.F.A. are also instrumental in co-operative movement education.

Second: If my group of pollution watchers had a project that concerned farmers, where would we go? Let's say that we thought low prices for agricultural products depleted the soil, as indeed they do, and we wished to do something about so much uncared for land growing up to weeds. Who would we go to?

First: The Q.F.A. and the Q.W.I. would like to work with a project such as that. Letters to the Minister of Agriculture, your Member of Parliament and agronomes would draw their attention to what you are trying to do. As a matter of fact, I think some action is about to take place. If you are interested in a project such as the one you mentioned, continue planning and watch for further information. The Government is working on a Plan whereby the lands in the Eastern Townships will be zoned and Zone 5, as it is now known, will have areas designated for certain activities. As an example, the Cowansville area is quite likely to be named as an agricultural zone with the Shefford Mountains named as a recreational area. Maybe we will meet you on that committee.

A Belated Anniversary Celebration

The **Inverness** Branch, **Megantic County**, had its 50th anniversary in 1970 but it wasn't until the September meeting last year that we decided to mark the occasion. The date picked was September 25.

Several of us had been to visit Ceramique de Beauce in St. Joseph de Beauce and had spoken so highly of our trip that the members voted to celebrate our belated anniversary by making a trip there. We invited our school fair judges, Mrs. A. Mimnaugh and Mrs. R. Marshall to go with us and left around 10:30 a.m. We stopped at the Aux Délices Restaurant in Thetford Mines for our dinner — a dinner we really enjoyed as there were no dishes to wash! After a stop of an hour or so in Thetford we followed Route One to St. Joseph de Beauce, enjoying the trip all the way.

The Ceramique de Beauce building is situated on a hillside street overlooking the Chaudière River. After you descend the stairs at the entrance, you will find a room on each side. Both rooms are lined with shelves laden with pottery. The room on the right contains imperfects, many of which it would take an expert to detect. Articles in this room are sold for a much reduced rate. Across from this room is a larger room filled with flawless pottery. What a colourful

Inverness President Mrs. A. Muir and Mrs. A. Little at Ceramique de Beauce.

scene it is! Needless to say we had a ball in both rooms.

We were invited to go upstairs to see the pottery being poured — this is the only way it is made there — into the moulds. From there we went on to where the moulds were emptied, the pottery checked and glazed and then placed in the ovens to be "cooked." How different the finished product looks.

They make and sell all types of lamps, vases, salts and peppers, jugs, bowls, teapots, ashtrays, plates, bean pots, soup dishes, mugs, and so on. They also make trophies to order. We did not see the trophies being made, but we did see samples of the finished product. Incidentally, those W.I. souvenir dishes that most of us bought were made at Ceramique de Beauce.

After our tour of the building, we returned to the show rooms where we soon found ourselves laden with pottery bought to use at home, for shower and wedding gifts, and some of us even thought ahead to Christmas.

Though it rained as we drove home, we enjoyed every minute of the trip and recommend it to one and all.

To further celebrate our birthday, we entertained the members of Denison's Mills. The guests were served dinner at the home of the President, Mrs. Muir, and from there we took them to our Government picnic area at Lysander Falls. The picnic tables are in a cleared area under white birch trees. In the summer, this spot is full of tents, trailers and cars. People from miles around come to spend the weekend in this picturesque spot where they can look down on the Falls from a high cliff that is well fenced. At the end of the picnic area the Department of Roads built long, wide steps going right to the edge of the basin below the Falls.

After our enjoyable visit to the Falls we all returned to Mrs. Muir's home where the Denison's Mills members were entertained at bingo and lunch before returning to their homes.

Wouldn't it be nice to celebrate every year instead of every 50 years!

Q.W.I. News

Mother's Day is every day
Not just one day in May.
Every day she strives to heed
Children's real and fancied need.
If they're near, they're waited on,
Worried over if they're gone;
So she smiles to hear them say,
"Sunday will be Mother's Day."

It's the "May" Convention this year. Dates for the Q.W.I. Provincial Convention at Macdonald College are May 25 and 26. Can't think of a Mother's Day gift? Send her to the Convention. Project for a branch? A senior member might enjoy a day or two at Macdonald.

Austin has a good idea — an Idea Box at every meeting. Do share some of these with us.

Some **Clarendon** and **Beechgrove** members attended the 75th anniversary of the Ontario W.I.'s held at the Ottawa Civic Centre.

New members were welcomed at **Abercorn** and **Cascapedia. Cascapedia** also made three Life Members.

Extras at annual meetings: **Brownsburg** a roast beef dinner; **Huntingdon** a buffet lunch plus a birthday cake for a member. This annual party is a means of entertaining ladies who might be interested in joining the W.I.

Lennoxville, Belvedere, Abercorn, Dalesville-Louise, Matapedia, South Bolton, Dewittville, Scotstown, New Richmond West, East Clifton, Canterbury — all report helping in various ways the sick, shut-ins, hot lunches for elementary school, elementary school trip, 4-H, fire victims, Quebec Service Fund, Handy bags, Save the Children Fund, Eskimo children (comic books), needy families, Easter treats for residents of Rosemary Home in Scotstown, cemetery, etc.

Ascot: Dr. Kathleen Atto, a Lennoxville W.I. member, told of her years of service in the U.S. nursing service in which she rose to the rank of Lieutenant-Colonel. She has also made important contributions to teaching, administration, and public relations in both the United States and Europe.
Mrs. Robert Lipsey, whose association with the W.I. at branch, county and provincial levels dates back to 1914, was presented with a blanket given by the Abby Pritchard Memorial Fund. Miss Edna Smith, Provincial Q.W.I. Vice-President, made the presentation. In expressing her thanks, Mrs. Lipsey said that at one time she had the pleasure of working with Miss Pritchard.

Canterbury members each have a "Sister Sue" for the year.

Rupert has two charter members after 46 years. Some work has been done on the W.I. hall — shovelling and window repairs.

Articles read . . . **Waterloo-Warden:** Beware of reclining chairs; **East Angus:** Coffee Grind; **Fort Coulonge:** Portable furniture; **New Richmond West:** Prejudice and Food and love in olden times.

Contest at **Matapedia:** matching the federal cabinet ministers.

An **Aubrey-Riverfield** member composed a poem on President Nixon's visit to China.

Prescription Please

Keep inviting friends and neighbours to your meetings. Some women may wish to know more about W.I. before joining. Make visitors feel welcome whether they wish to join or not.

Inverness has completed branch history to date.

Canterbury and **East Clifton** members have been giving radio broadcasts. One subject was Bill C-176 by Mrs. Coates.

County projects: **Pontiac** demonstration on macrame and Dorset embroidery.

Bonaventure County held another successful President's Banquet.

Abbottsford roll call was French phrases.

Quyon's refreshments were rye bread, smoked meat and dainties.

Thought from **Matapedia:** Unity creates force.

Trying to improve your W.I.? **Beechgrove** suggests 1) more speakers and demonstrations on the program; 2) Try to acquire more members, especially younger women in the community; 3) Take more educational trips and excursions.

Alert citizens . . . **Bury** members discussed the decision of the Department of Education to lengthen the school day of the secondary schools by 15 minutes. Letters of protest will be sent to key personnel involved. **Dundee** members discussed local affairs, ploughing of roads, Council, local newspaper, and estate duties. **Wyman** sent letters to the Department of Public Works re lights at Roadside Park and the possibility of having new approach to the Park paved. At **Hemmingford** several members went by chartered bus with members of Cercles des Fermières to the Agricultural Conference of the Department of Agriculture. The sessions were conducted entirely in French with simultaneous translation into English. **Beebe** heard municipal affairs explained by the Mayor of Ogden.

Kinnear's Mills invited to "Open House" as a new wing opened at the Sherbrooke Protestant Hospital.

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